## EAST Search History

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	979	(123/1A).COLS.	USPAT; USOCR	OR	OFF	2008/07/08 13:57
<b>S</b> 2	8	S1 AND (((intake adj valve) or (sealing seat) or (injection needle) or (fuel adj injector)) WITH (coating or coat or coated))	USPAT	OR	OFF	2008/07/08 14:00
S3	4	S1 AND (((intake adj valve) or (sealing seat) or (injection adj needle) or (fuel adj injector)) WITH (coating or coat or coated))	USPAT	OR	OFF	2008/07/08 14:03
94	788	(((intake adj valve) or (saaling seat) or (saaling seat) or (fuel adj injector)) SAME (coating or coat or coated)) SAME (((chromium adj nitride) or (zirconium adj nitride) or (vanadium adj nitride) or (ittanium adj nitride) or (ittanium adj nitride) or (titanium adj aluminum adj nitride) or (chromium adj aluminum adj nitride) or (chromium adj nitride) or (cryconium adj aluminum adj nitride) or (Cryon) or (TiN) or (TN) or (ZrN) or (VN) or (NbN) or (TIANN) or (CANN)	USPAT	OR .	OFF	2008/07/08
S5	8	S4 AND "123".clas.	USPAT	OR	OFF	2008/07/08 14:21

S6	134	(("20020059899") or	USPAT;	OR	OFF	2008/07/08
		("20020113310") or	USOCR	****		15:09
		("20030186534") or	****	******		
	-	("20030224611") or	*****	******		
		("20040005981") or				
		("20040187798") or				
	İ	("20050238890") or				
	i	("20050255695") or				
		("20060096852") or				
		("20060154108") or				
		("20060286378") or		***		
		("20060292843") or				
		("20070089642") or		***		
		("200700990457") or				
		("20070030457") or		**		
		("4264682") or				
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		("4269899") or				
		("4336117") or		***		
		("4337300") or				
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		("4341843") or				
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("7368182")	)).PN.		

\$7	35	("20020022128"   "3738779"   "3797245"   "3945764"   "4028010"   "4097196"   "4212596"   "4370854"   "4402994"   "4426162"   "4553904"   "4463740"   "4856713"   "5226975"   "5237967"   "5249554"   "5309874"   "5409165"   "5672366"   "5673618"   "5697764"   "5713333"   "5771873"   "5713333"   "5771873"   "57439570"   "6145763"   "683570"   "6145763"   "8254103"   "FE34956")   PN. OR ("7021557")	US-PATI; USPAT; USCOR	OR	OFF	2008/07/08 15:43
S8	374	(239/591).OOLS.	USPAT; USOCR	OR	OFF	2008/07/08 15:49
S11	15	("20030047624"   "4875658"   "4875698"   "4875698"   "5024202"   "5069189"   "5170766"   "5172865"   "5494223"   "5854855"   "5859376"   "5944262"   "5950322"   "5979786"   "5983865"). PN. OR ("7182281").	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/08 15:53
S10	27	("2627259"   "3773265"   "4075999"   "4212602"   "4552311"   "4714198"   "4867116"   "4871434"   "5040501"   "5069189"   "5173339"   "5226975"   "5271823"   "5474234"   "5752308"   "5819774"   "57883816"   "5904125"   "6082499"   "6145763"   "6302337"   "6311901"   "6484700"   "6561167"). PN. OR ("7051961").	US-PGPUB; USPAT; USOOR	OR	OFF	2008/07/08 15:53

S9	35	("20020022129"   "3738779"   "3797245"   "39345764"   "4028010"   "4097196"   "4212596"   "4370854"   "4402994"   "4426162"   "4553904"   "4463740"   "4856713"   "5226975"   "5227967"   "5249554"   "5309874"   "5409165"   "5492573"   "5641121"   "5672386"   "5773734"   "5783261"   "5843571"   "5783261"   "5843571"   "5783261"   "5843571"   "5783261"   "6083570"   "6145763"   "6254103"   "RE34956"). PN. OR ("7021557").	US PCPUB; USPAT; USOOR	OR	OFF	2008/07/08 15:53
S12	3681	239/88.cds. or 239/533.2. cds. or 239/533.12.cds. or 239/533.14.cds. or 239/585.1.cds. or 239/585.1.cds. or 239/585.3.cds. or 239/585.5.cds. or 239/591.cds. or 239/584. cds. or 29/888.06.cds. or 29/888.061.cds. or 123/688.cds.	USPAT	OR	OFF	2008/07/08 16:00
S13	54	S12 AND ((chromium adj nitride) or (tatanium adj nitride) or (zirconium adj nitride) or (vanadium adj nitride) or (niobium adj nitride) or (ittanium adj aluminum adj nitride) or (chromium adj aluminum adj nitride) or (zirconium adj aluminum adj nitride) or (CN) or (TiN) or (ZN) or (VN) or (NbN) or (TiAN) or (CAN))	USPAT	OR	OFF	2008/07/08 16:03
S14	0	S12 AND (nanostructured adj layer)	USPAT	OR	OFF	2008/07/08 16:35
S15	48	(nanostructured adj layer)	USPAT	OR	OFF	2008/07/08 16:36

L2	116	L1 AND ((chromium adj nitride) or (tatanium adj nitride) or (zirconium adj nitride) or (vanadium adj nitride) or (niobium adj nitride) or (titanium adj aluminum adj nitride) or (chromium adj aluminum adj nitride) or (zirconium adj aluminum adj nitride) or (CN) or (TiN) or (ZrN) or (VN) or (NbN) or (TTAN) or (CAN))	US-PGPUB; USPAT; USOCR	UH	OFF	2008/07/09 17:44
L1	48	(nanostructured adj layer)	USPAT	OR	OFF	2008/07/09 17:44
L3	87	((microstructured adj layer) OR (nanostructured adj layer)) AND ((chromium adj nitride) or (tatanium adj nitride) or (vanadium adj nitride) or (violoium adj nitride) or (toibium adj nitride) or (toibium adj nitride) or (chromium adj aluminum adj nitride) or (chromium adj aluminum adj nitride) or (Cronium  or (Cronium) or (Cronium) or (Cronium)	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09 18:04
L5	0	((microstructured adj layer) OR (nanostructured adj layer)) AND (239/88.cds. or 239/533.2.cds. or 239/533.12.cds. or 239/585.1.cds. or 239/585.3.cds. or 239/585.3.cds. or 239/585.5.cds. or 239/585.5.cds. or 239/586.06.cds. or 239/586.06.cds. or 239/586.06.cds. or 239/586.06.cds. or 239/688.061.cds. or	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09 18:26

L6	12	((microstructured adj layer) OR (nanostructured adj layer)) AND ("239".clas. OR "29".clas. OR "123". clas.)	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09 18:27
L7	273	((microstructured adj layer) OR (nanostructured adj layer))	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09 18:29
L8	72	((microstructured adj layer) OR (nanostructured adj layer)) SAME (advantage \$1 or motivation or benefi \$5 or resist\$4 or improv \$4 or prevent\$3 or wear)	US-PGPUB; USPAT; USOCR	OR	ON	2008/07/09 18:32
L9	0	(10/060912).APP.	USPAT; USOCR	OR	OFF	2008/07/09 18:35
L11	23	["3808740"   "3849180"   "4168112"   "4336306"   "4423088"   "4539061"   "4701366"   "4925530"   "5208111"   "5308088"   "5314855"   "5342530"   "5716709").PN. OR ["6022590").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09
L10	1	("6022590").PN.	USPAT; USOCR	OR	OFF	2008/07/09 18:38
L12	44	((microstructured adj layer) OR (nanostructured adj layer)) SAME (coat\$3) SAME (auto\$6 or engine or metal)	US-PGPUB; USPAT; USOCR	OR	ON	2008/07/09 18:41
L13	8	((microstructured adj layer) OR (nanostructured adj layer)) SAME (PVD or PECVD)	US-PGPUB; USPAT; USOCR	OR	ON	2008/07/09 19:06
L15	1	("20030156313").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09 19:07
L14	0	("20030156313").PN.	USPAT; USOCR	OR	OFF	2008/07/09 19:07

L17	5	L16 AND ((chromium adj nitride) or (tatanium adj nitride) or (vanadium adj nitride) or (vanadium adj nitride) or (riobium adj nitride) or (titanium adj aluminum adj nitride) or (chromium adj aluminum adj nitride) or (zirconium adj aluminum adj nitride) or (CrN) or (TiN) or (ZrN) or (VN) or (NbN) or (TiAIN) or (CrAIN)) AND (PVD or PECVD)	USPAT	OR	OFF	2008/07/09 19:13
L16	3681	239/88.cds. or 239/533.2. cds. or 239/533.12.cds. or 239/533.12.cds. or 239/585.1.cds. or 239/585.3.cds. or 239/585.3.cds. or 239/585.5.cds. or 239/595.5.cds. or 239/596.5.cds. or 239/580.6.cds. or 239/888.061.cds. or 123/688.61.cds. or	USPAT	OR .	OFF	2008/07/09 19:13
L18	10	L16 AND ((chromium adj nitride) or (tatanium adj nitride) or (tatanium adj nitride) or (vanadium adj nitride) or (niobium adj nitride) or (titanium adj aluminum adj nitride) or (chromium adj aluminum adj nitride) or (zirconium adj aluminum adj nitride) or (CN) or (TiN) or (ZN) or (VN) or (NbN) or (TIAN) or (CAN)) AND (PVD or PECVD or (physical adj vapor adj deposition))	USPAT	OR	OFF	2008/07/09 19:14
L20	111	["4441894"   "4469801"   "5182238"   "5376599"   "5677252"   "6037243"   "6124638"   "6436825"   "6440590"   "6475912"). PN. OR ("7097922"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/09 19:26

L19	1	(nanocrystalline near3 TiN) same matrix same amorphous same (silicon adj nitride)	USPAT	OR	OFF	2008/07/09 19:26
L22	1	(nanocrystalline near3 TiN) same (silicon adj nitride)	USPAT	OR	OFF	2008/07/09 19:27
L21	1	(nanocrystalline near3 TiN) same amorphous same (silicon adj nitride)	USPAT	OR	OFF	2008/07/09 19:27
L23	54	(TiN) same matrix same amorphous same (silicon adj nitride)	USPAT	OR	OFF	2008/07/09 19:28
L24	4	(TiN) with matrix with amorphous with (silicon adj nitride)	USPAT	OR	OFF	2008/07/09 19:31

7/9/2008 7:41:10 PM

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